

REMARKSI. Introduction

In response to the Office Action dated July 26, 2007, claims 9, 18 and 27 have been canceled, and claims 1, 10, 19, 20 and 22-26 have been amended. Claims 1-2, 4-8, 10-11, 13-17, 19-20 and 22-26 remain in the application. Re-examination and re-consideration of the application, as amended, is requested.

II. Statutory Subject Matter Rejection

On page 2 of the Office Action, claims 19-27 are rejected under 35 U.S.C. §101 as being directed to non-statutory subject matter.

Applicants' attorney has amended claims 19-20 and 22-26 as indicated above to overcome these rejections.

However, should issues still remain in this regard, Applicants' attorney requests that the Examiner indicate how the rejection can be overcome, in accordance with the directives of the Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility (Interim Guidelines) II. Specifically, should it be necessary, the Applicants' attorney requests that the Examiner identify features of the invention that would render the claimed subject matter statutory if recited in the claim. See Interim Guidelines IV.B.

III. Non-Art Claim Objections

On page 9 of the Office Action, claims 6, 8, 15, 17, 24 and 26 were objected to because of certain informalities.

Applicants' attorney respectfully traverses these objections.

With regard to the objections to claims 8, 17 and 26, which recite "thresholding the audio level," Applicants' attorney notes that the specification recites the following:

Page 9, line 30

A loudness calculation 406 performs the steps of measuring an audio level for the dequantized and denormalized sub-band data 400 without reconstructing the audio signal using one or more channel characteristics 408, averaging the measured audio levels over time, and comparing the averaged audio levels against at least one application-specific threshold to determine whether the threshold is exceeded. The loudness calculation 406 typically involves measuring the signal power of the audio signal, as represented by the sub-band data 400, to determine the audio presence and level. However, the details of the calculation may vary by

application. (Emphasis added.)

Applicants' attorney asserts that the above portion of the specification sufficiently supports the limitations found in claims 8, 17 and 26.

With regard to the objections to claims 6, 15 and 24, which recite that "the sub-band data represents the audio signal's power in each frequency band represented by each sub-band at a particular point in time," Applicants' attorney notes that the specification recites the following:

Page 9, line 16

Initially, the sub-band data 400 is extracted from the MPEG data stream. The values of the sub-band data 400 represents the strength of the audio signal in a frequency band covered by the sub-band data 400 at that point in time. (Emphasis added.)

Applicants' attorney asserts that the above portion of the specification sufficiently supports the limitations found in claims 6, 15 and 24.

IV. Prior Art Rejections

In paragraphs (5)-(6), the Office Action rejected claims 1, 8, 10, and 17 under 35 U.S.C. § 102(e) as being anticipated by McDowell, U.S. Patent No. 6,931,370 (McDowell). In paragraphs (7)-(8), the Office Action rejected claims 2 and 11 under 35 U.S.C. §103(a) as being unpatentable over McDowell in view of Fiocca, U.S. Patent No. 5,625,743 (Fiocca). In paragraph (9), the Office Action rejected claims 4, 5, 13, and 14 under 35 U.S.C. §103(a) as being unpatentable over McDowell in view of Pierret et al., U.S. Patent No. 3,843,942 (Pierret). In paragraph (10), the Office Action rejected claims 7 and 16 under 35 U.S.C. §103(a) as being unpatentable over McDowell in view of Smith, U.S. Publication No. 2002/0173864 (Smith). In paragraph (11), the Office Action rejected claims 9 and 18 under 35 U.S.C. §103(a) as being unpatentable over McDowell in view of Friedman, U.S. Patent No. 5,337,041 (Friedman). In paragraph (12), the Office Action rejected claims 19, 20, and 26 under 35 U.S.C. §103(a) as being unpatentable over McDowell in view of official notice. In paragraph (13), the Office Action rejected claim 20 under 35 U.S.C. §103(a) as being unpatentable over McDowell in view of official notice in further view of Fiocca. In paragraph (14), the Office Action rejected claims 22 and 23 under 35 U.S.C. §103(a) as being unpatentable over McDowell in view of official notice in view of Pierret. In paragraph (15), the Office Action rejected claim 25 under 35 U.S.C. §103(a) as being unpatentable over McDowell in view of official notice in further view of Smith.

Applicants' attorney respectfully traverse these rejections.

Independent claims 1, 10 and 19 have been amended to better distinguish over the references. Claim 1 is representative, and recites a method of audio level control for compressed audio in a data stream, comprising: (a) extracting sub-band data from the data stream; (b) dequantizing and denormalizing the extracted sub-band data; (c) measuring an audio level for the dequantized and denormalized sub-band data without reconstructing the audio signal using channel characteristics; (d) comparing the measured audio level against one or more thresholds; and (e) triggering an alarm when one of the thresholds is exceeded, wherein the thresholds are set to generate the alarm based on loss of the audio signal, or when an average level of the audio signal is too high or too low.

The pertinent combination of references, namely McDowell and Friedman, does not teach or suggest the combination of elements recited in Applicants' independent claims. Specifically, the combination of McDowell and Friedman does not compare a measured audio level against one or more thresholds; and then trigger an alarm when one of the thresholds is exceeded, wherein the thresholds are set to generate the alarm based on loss of the audio signal, or when an average level of the audio signal is too high or too low.

For example, McDowell merely describes a system for providing interactive audio in a multi-channel audio environment. However, the portions of McDowell cited by the Office Action merely describe how the system measures the audio level to determine whether a subband is inaudible, in which case it is removed from the mixing process.

In another example, Friedman discloses a personal safety guard system for a stray person or pet, where a guardian transmits an alarm condition signal from a hand-held unit carried by the guardian that is received by a portable alarm unit worn by the person or pet under the guardian's supervision, and the alarm unit operates to alert the wearer and others nearby that the guardian is looking for them. The portions of Friedman cited by the Office Action merely describe how the portable alarm unit receives a signal that then triggers the portable alarm unit.

However, neither reference measures an audio level of compressed audio in a data stream, and triggers an alarm when a threshold is exceeded, wherein thresholds are set to generate the alarm based on loss of the audio signal or when an average level of the audio signal is too high or too low.

Indeed, the combination of McDowell and Friedman could not be used for the same purpose as Applicants' invention, namely the automatic measurement of audio presence and level by direct processing of a data stream.


Thus, Applicants' attorney submits that independent claims 1, 10 and 19 are allowable over the references. Further, dependent claims 2, 4-8, 11, 13-17, 20 and 22-26 are submitted to be allowable over the references in the same manner, because they are dependent on independent claims 1, 10 and 19, respectively, and thus contain all the limitations of the independent claims. In addition, dependent claims 2, 4-8, 11, 13-17, 20 and 22-26 recite additional novel elements not shown by the references.

V. Conclusion

In view of the above, it is submitted that this application is now in good order for allowance and such allowance is respectfully solicited. Should the Examiner believe minor matters still remain that can be resolved in a telephone interview, the Examiner is urged to call Applicants' undersigned attorney.

Respectfully submitted,

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